AVAYA

Telephone Paging Amplifier
10-Watt Model

Installation and Use Manual

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Notice

Every effort was made to ensure that the information in this guide was complete and accurate at the time of printing. However, information is subject to change.

Important Safety Information

Always follow these basic safety precautions when installing and using the unit:

1. Read and understand all instructions.
2. Follow all warnings and instructions marked on the product.
3. DO NOT place the product in a separate enclosure or cabinet, unless proper ventilation is provided.
4. Never spill liquid on the product. Doing so may result in serious damage to the components.
5. Repair or service must be performed by a factory authorized repair facility.
6. The product is provided with a UL-CSA approved, 3-wire ground type plug. This is a safety feature. DO NOT defeat the safety purpose of the grounding type plug. DO NOT staple or otherwise attach the AC power supply cord to building surfaces.
7. DO NOT use the product near water or in a wet or damp place (such as a wet basement).
8. DO NOT use extension cords. The product must be installed within 6 feet of a grounded outlet receptacle.
9. DO NOT install telephone wiring during a lightning storm.
10. DO NOT install telephone jacks in a wet location unless the jack is specifically designed for wet locations.
11. Never touch uninsulated wires or terminals, unless the line has been disconnected at the paging or controller interface.
12. Use caution when installing or modifying paging or control lines.

Support Information

Paging systems integrated with small phone systems such as Merlin Legend and Partner are supported by the National Service Assistance Center (NSAC). The main number for the NSAC is 800-628-2888. Paging systems integrated with large switches such as the DEFINITY G3 are supported by the Technical Service Center (TSC). The main number for the TSC is 800-242-2121.

Domestic and International Approvals

UL and CSA Listed.

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Telephone Paging Amplifier

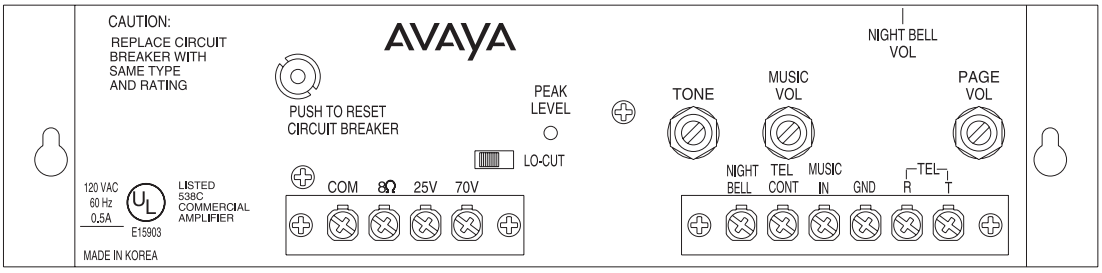


Figure 1: Telephone Paging Amplifier

Introduction

This document describes the Avaya 10-watt Telephone Paging Amplifier. This is a full-featured, wall-mounted amplifier that provides inputs for dry loop 600-ohm telephone page signal and background music source. A set of control inputs allow an external contact closure to mute background music and open the telephone page channel. Background music mute level during page is adjustable and the music slowly fades back in after the page is completed. An automatic level control system limits the output level of the telephone page channel so that differences in the volume of the paging party's voice will be less noticeable. A tone control is provided for optimizing tonal balance for the specific installation. This amplifier includes a built-in night bell that can be triggered by an external contact closure. The night bell mutes the background music, but not pages.

Package Contents

* Telephone Paging Amplifier unit
* 2 mounting screws
* Installation and Use Manual

Before You Start Review the contents of the box. Read through this entire manual to understand how to install and operate this product.

NOTE: Use minimum 22 AWG shielded, twisted pair wire for your speaker runs.

Installation

Mounting

The amplifier is designed for wall mount applications. The 10-watt amplifier weighs 4 lb.

NOTE: The amplifier will produce heat during operation which will rise and may cause problems for temperature-sensitive equipment mounted above it. Mount the amplifier near the top of the backboard so that no other equipment will be above it. If this is not possible, then allow at least 12" between the top of the amplifier and the bottom of any equipment positioned above it. Also allow at least 4" between the bottom of the amplifier and any equipment below it to allow for adequate air circulation. In addition, because the unit itself gets hot, avoid touching it during operation.

Wall Mounting

To wall mount this unit, use the two 5/8" pan head screws with nylon washers provided. The screws should protrude approximately ¼" from the surface of the backboard. Lift the amplifier and place it over the two screws using the keyhole slots in the flanges at the sides of the amplifier. The screws should engage the keyhole slots. Once in the keyhole slots, tighten the screws to secure the amplifier.

Wiring Connections

IMPORTANT: Before making any connections or wiring changes to the amplifier or any equipment connected to the amplifier, make sure that the amplifier is NOT plugged into an AC outlet.

NOTE: The amplifier does not have a power switch, so it must be unplugged in order to turn the power off.

Input Wiring

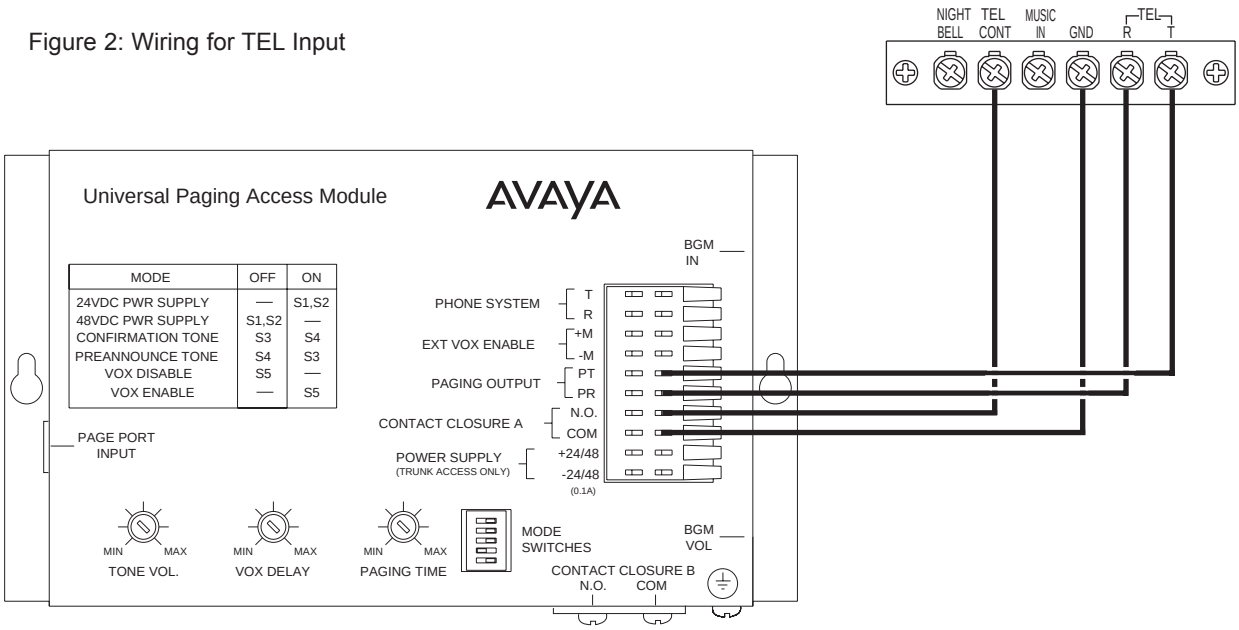
All signal input and control wiring is made to the terminal strip on the front of the unit.

TEL Input and Control Pair

The telephone input is a 600-ohm, dry loop, balanced input available at the T and R terminals. It is controlled by a dry contact closure that is made between the control terminals labeled TEL CONT and GND. Shorting these terminals together will mute the background music input and open the Tel page channel (see Figure 2).

NOTE: In instances where the amplifier is to be placed permanently in the Tel page mode, a wire jumper must be installed between the TEL CONT and GND terminals.

Figure 2: Wiring for TEL Input



Tel Input to Universal Coupler

After properly connecting your Universal Coupler (909) to your Auxiliary Trunk port, set your switches as follows: C1/C2 to C2; Rocker Switch 3 closed; and all others open. Coming out of the J2 Jack of the Coupler, connect the blue/white pair to the amplifier's T and R terminals.

Music Input

A pair of terminals are provided for the connection of a background music source. Use a pair of wires (not included) to make this connection. This is a mono input and requires that the output of stereo sources be converted to mono by using a Y-adapter (not included). Use a LUWMT1A (COM Code: 405891680) to balance the music input, if necessary, to reduce hum/noise from a grounded music source.

Night Bell Connection

An external contact closure activates the night bell function of the amplifier. When using an external contact closure, connect the closure pair across the Night Bell terminal and GND. The night ringer follows the cadence of the activating signal.

CAUTION: Do not apply a high voltage (90-105V AC, 20-30Hz) ring signal to the Night Bell terminals. Use a dry contact closure only.

Output Wiring

All output wiring connections are made to the terminal strip located on the left side of the LU10WAMP.

IMPORTANT: Before making any connections or wiring changes to the amplifier or any equipment connected to the amplifier, make sure that the amplifier is NOT plugged into an AC outlet.

NOTE: The amplifier does not have a power switch, so it must be unplugged in order to turn the power off.

Speaker Connection

70-volt speaker connections are made between the 70V and COM terminals on the output terminal strip (see Figure 3). Use minimum 22 AWG shielded, twisted pair cable. Connect the shield of the cable to the terminal strip.

NOTE: The amplifier output terminal strip also includes terminals for 8-ohm and 25V speaker connections. These are provided for special applications and are generally not used.

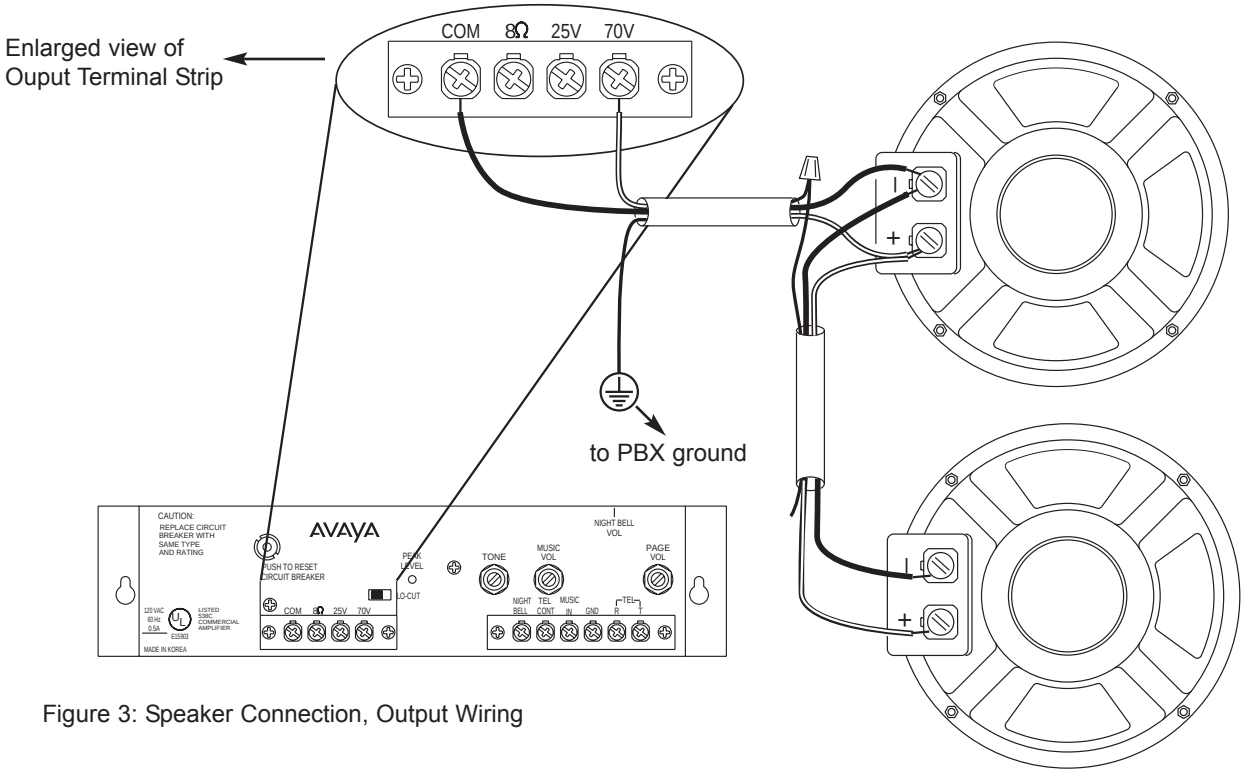


Figure 3: Speaker Connection, Output Wiring

Operation

IMPORTANT: Before plugging the amplifier into an AC outlet, turn all volume controls to their full counterclockwise positions and all other controls to their reference position.

Indicator

PEAK LEVEL The PEAK LEVEL LED illuminates whenever the speaker output signal level approaches its maximum level. This indicator is used when setting volume levels. Maximum output level is achieved when the PEAK LEVEL indicator flashes intermittently on loud peaks of the input signal. If the indicator illuminates steadily, the output signal volume is set too high and distortion is occurring. Decrease the volume control for the appropriate input until the indicator flashes only intermittently.

Controls

PAGE VOLUME This control adjusts the level of the telephone page output. A reference level setting position is provided with this control. When set to this position, the output level of the page should be optimally loud without distortion. Further adjustment can be made using the PEAK LEVEL indicator, as described above.

MUSIC VOLUME This control adjusts the level of the background music output. No reference level setting position is provided. The background music level should be set to an acceptable level without overdriving the system. When adjusting this level, use the PEAK LEVEL indicator, as described above.

NIGHT BELL This control adjusts the level of the night bell tone output. No reference level setting position is provided. The night bell level should be set to the customer's satisfaction. When adjusting this level, the PEAK LEVEL indicator should be used to ensure that the amplifier signal is not distorted.

LO-CUT SWITCH Set the LO-CUT switch to the LO-CUT position for optimum speech reproduction and to reduce unnecessary low frequencies.

TONE Use the TONE control to optimize the tonal balance of the amplifier output.